

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number  
**WO 2004/052389 A2**

(51) International Patent Classification<sup>7</sup>: **A61K 38/00**

(21) International Application Number:

PCT/GB2003/005329

(22) International Filing Date: 5 December 2003 (05.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/431,549 6 December 2002 (06.12.2002) US  
60/480,138 20 June 2003 (20.06.2003) US

(71) Applicant (for all designated States except US): **SINGAPORE GENERAL HOSPITAL PTE LTD.** [SG/SG]; 11 Third Hospital Avenue, #07-00, SNEC Building, Singapore 168751 (SG).

(71) Applicant (for MN only): **FORREST, Graham, R.** [GB/GB]; Mewburn Ellis, York House, 23 Kingsway, London, Greater London WC2B 6HP (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **XIAO, Zhi-Cheng** [CA/SG]; 173 Chin Swee Road, #32-02, Singapore 169878 (SG).

(74) Agents: **FORREST, Graham, R.** et al.; Mewburn Ellis, York House, 23 Kingsway, London, Greater London WC2B 6HP (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **MATERIALS AND METHODS RELATING TO TREATMENT OF INJURY AND DISEASE TO THE CENTRAL NERVOUS SYSTEM**

(57) Abstract: The application provides materials and methods for promoting myelination of neuronal axons in the CNS. These derive from the findings firstly that the molecules Nogo and Caspr interact with one another during establishment and maintenance of the axoglial junction, and secondly that the molecules F3 and NB-3 are capable of promoting oligodendrocyte maturation via interaction with Notch. The materials and methods provided may be used in the treatment of CNS damage, in particular the treatment of spinal cord injury, multiple sclerosis, epilepsy and stroke.

WO 2004/052389 A2